# NEWTON LIED

Just about every time I put pen to paper or opened my big mouth about my "Unproof", I was beaten and belabored about the head and shoulders with the dull and blunt instrument called appeals to authority. That authority was Issac Newton, the mathmetician, who quickly became the bane to my existence. I decided to see if I couldn't "get da goods on im" as we used to say when I was a street kid. To effect this I "wasted" a good bit of my time by sniffing through Newton's "*Principia*."

The gospel according to Saint Newton is a difficult book to understand because both the topics and proofs play hop-scotch by leaping all over the book. I scan read the entire thing dropping blue marker papers in areas of interest and then began to zero in on errors, poor deductions and leaps in faith. In mathematics, unlike religion, leaps in faith are not tolerated. The only mandate in mathematics is that in each step of a proof the value must be valid, the terms appropriate and the logic impeccable. Not that mathematicians seem to pay much attention to these strictures but, at least, that's the way it is supposed to be.

On June 11, 1987, the newspapers carried an Associated Press release about a college kid from the University of Chicago. He had won a prize for proving one of Newton's calculations off by 15 %. The student wondered how the professional philosophers had missed this one error for 300 years. During my wanderings through the murk of Newton's work I discovered that many of his arithmetic values were not only wrong, by modern standards but also different each time they were listed. I was not too surprised to find that many of his predictions were also wrong and I also stumbled on a mind boggling boo-boo. He based one of his most important proofs on an assumption I had whimsically proven untrue many years before while writing one of my Mensa columns. What bothered me at the time was how the professional philosophers of three hundred years missed finding what I found in the "*Principia.*" Imagine my surprise when a retired professional physicist, a Mensan, showed amazement because I had read Newton's book. He had never read the book nor did he know anyone who had. Unlike that young scientist, all I received for my efforts was abuse.

Without further preamble I firmly state that Newton was the mathematician who might have been responsible for that old adage, *"Figures don't lie but liars do figure."* He allegedly spent 20 years writing the "Principia" where in a fashion, typical to mathematicians, he would "prove" something and then later use that proof as a stepping stone to prove something else. By a succession of proofs he eventually proved that the force of gravity is determined from the product of each mass divided by the square of the distances between their exact centers.

Many years later in "Newton's Clock" I found this statement by Ivars Peterson, "Moreover, historian Richard S. Westfall has pointed out that Newton wasn't entirely immune to the temptation to adjust calculations and data to fit his preferred theories." [1] Where I come from this is called lying!

The cause of gravity is supposed to be the innate property of mass to attract all other mass. The reading of the "Principia" leads to no other conclusion. Because many of Newton's peers preferred the Descartes theories to his action at a distance without mediation of any other entity, Newton later began to vacillate and many times vigorously objected to that interpretation. In a series of letters to Bently written around 1692 he wrote, *"You sometimes speak of gravity as essential and inherent to matter. Pray, do not ascribe that notion to me;"* [2]

In a later letter he states, *"It is inconceivable, that inanimate brute matter, should, without the mediation of something else, which is not material, operate upon and affect other matter without mutual contact, ..."* He continues, *"That gravity should be innate, inherent, and essential to matter, so that one body may act upon another at a distance through a vacuum, without the mediation of any thing else, by and through which their action and force may be conveyed from one to another, is to me so great an absurdity, that I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it."* [3] These statements, so contradictory to the way we think of gravity, caused me to begin a very close examination of his book.

## Newton's Planetary Order:

While speaking of the density of the various planets and their distance from the Sun, he believed that *"the denser bodies always possess the nearer places,"* [4] The densities of the bodies are all in grams per cc. Pluto has been left off the list because of the recent controversy regarding its density. The first column lists the actual position of the planets, the second column lists the planets in order of their decreasing density and the third column lists the modern densities. A star indicates a match between his prediction and actuality. [5]

### Newton's Densities

| | Newton's Prediction | Position By Density | Actual Densities |
|---|---|---|---|
| | Mercury | Earth | 5.519 |
| | Venus | Mercury | 5.431 |
| | Earth | Venus | 5.256 |
| * | Mars | Mars | 3.907 |
| | Jupiter | Neptune | 2.272 |
| | Saturn | Uranus | 1.650 |
| | Uranus | Jupiter | 1.337 |
| | Neptune | Saturn | 0.688 |

Mars is the only match making his success rate one for eight. This is only as accurate as pure chance would dictate. His power of scientific prediction was dismal!

## Newton's Densities of the Bodies:

The modern density of the Moon is listed as 3.342 and it is 1.41 for the Sun. [6] In this

that each is greatly in error. To compute the percentage of his error I subtract the smaller from the larger and then divide by the smaller. First he makes a statement that the relative densities of the bodies are as follows: [7]

| Newton | Sun = 100 | Jupiter = 94.5 | Saturn = 67 | Earth = 400 |
| Today's Densities | Sun = 1.41 | Jupitor = 1.337 | Saturn = .688 | Earth = 5.519 |

All the following statements were made by Newton:

1. **Jupiter's density** would be 1.332      1.41 x .945 = 1.332
   (1.337 - 1.332) / 1.332 = .0037    the error is .37 %

2. **Saturn's density** would be .944      1.41 x .67 = .9447
   (.9447 - .688) / .688 = 373    the error is 37.3 %

3. **Earth's density** would be 5.64      1.41 x 4 = 5.64
   (5.64 - 5.519) / 5.519 = .0219    the error is 2.2 %

Then he sets the value of the Moon's density in relation to the Earth and the Sun. [8]

1. **Moon's density** is 4891/4000 of the Earth's      (5.519 x 4891) / 4000 = 6.748
   (6.748 - 3.342) / 3.342 = 1.019    the error is 102 %

2. **Moon's density** is 4.4815 times the Sun's      1.41 x 4.815 = 6.789
   6.789 - 3.342) / 3.342 = 103.1    the error is 103 %

Again we find new values for the Moon in relation to Earth & Sun. [9]

1. **Moon** is denser than the Earth by 23 to 16      (5.519 x 23) / 16 = 7.933
   (7.933 - 3.342) / 3.342 = 1.373    the error is 137 %

2. **Moon** is denser than Sun by 5.7 times      1.41 x 5.7 = 8.037
   (8.037 - 3.342) / 3.342 = 1.404      the error is 104 %

Only one out of 7 is correct and one more is close.

## Newton's Magnetic Attraction:

According to Newton, the power of a magnet diminishes as to the cube of the distance. [10] Magnetic fields which are easy to test, vary by the square of the distance. Newton's gravity, which is impossible to test, seems to vary by the cube.

## Newton's Tidal Gravitation:

Newton claims the Moon's force on the sea is 4.4815 times greater than that of the Sun while our current value is 2.2 to 1. [11]

(4.4815 - 2.2) / 2.2 = 1.037    the error is 103 %

These errors are microscopic when compared to the assumption by which he "proved" that the Moon was held in orbit by the force of attractive gravity. Here he writes, *"Suppose several moons to revolve about the earth, as in the system of Jupiter or Saturn; the periodic times of these moons (by argument of induction) would observe the same law Kepler found to obtain among the planets; and therefore their centripetal forces would be inversely as the squares of the distances from the centre of the earth, by Prop. I of this book."* *"... And therefore the force which retains the moon in it's orbit is that very force which we commonly call gravity;"* [12]

He is loosely referring to Kepler's Harmonic Law, which states that a planet's orbital distance cubed divided by the period squared gives a constant that should be the same for each planet.

$$\text{KEPLER NO.} = \frac{\text{(DISTANCE)}^3}{\text{(PERIOD)}^2}$$

And... it is absolutely true ... for every planet.

Kepler's third law, contrary to what you may have been told, is the only mechanism that can calculate the orbit of a planet from its period and conversely the period from the orbit. Kepler's Harmonic Law states that the cubes of the mean distance of the planets from the Sun are proportional to the squares of their times of revolution about the Sun. The key word here is the Sun and please note that mass means nothing, only velocity counts.

Kepler was a mathematician by training and an astrologer for survival and although he lived in dire poverty, even with Tycho's stipend, he was faithful to his charge. He patiently and methodically tested idea after idea against Brahe's hard observational facts. In this time and place there were no computers, slide rules, or logarithms. Even the "Ten Place Trig Tables" by Vega were far in the future. For this Herculean task his only weapons were the goose quill pen and expensive paper. He was also called on to defend his possession of the raw data from the heirs of Tycho. It took 20 years, but he discovered the three geometric laws of planetary motion. Later Newton would use the Kepler Laws as the basis for his three laws of motion and the theory of gravity.

One day, years before, I had focused my scientific skepticism on Kepler's third law. I couldn't believe that the planets discovered since Kepler's time would conform. How could his law possibly be valid? There is no mention of mass here and the distance is cubed not squared. Why should the orbits be in harmony with the time of revolution? If true then the forces that govern planetary motion must be based on velocity and inertia, not upon mass. I had to test theory with calculation.

I had called on my computer, to "compulate" the Harmonic truth for all nine planets. I fed in the radii of the orbits in Earth units (AU) and the periods in sidereal years (SY). I would compare each planets Kepler number to that of the Earth by subtracting the smaller from the larger and then multiply this by 100 to obtain the deviation from Kepler's Law

| Planet | Dist.(AU) | Period (SY) | Kepler # | Deviation (%) |
|--------|-----------|-------------|----------|---------------|
| Mercury | .38744 | .240899 | 1.002175 | .217 |
| Venus | .72281 | .615185 | .997840 | .215 |
| Earth | 1.00000 | 1.000000 | 1.000000 | .000 |
| Mars | 1.52330 | 1.880820 | .999221 | .007 |
| Jupiter | 5.20250 | 11.861300 | 1.000856 | .008 |
| Saturn | 9.54070 | 29.456800 | 1.000851 | .008 |
| Uranus | 19.19000 | 84.008100 | 1.001342 | .134 |
| Neptune | 30.08600 | 164.784000 | 1.002913 | .291 |
| Pluto | 39.50700 | 248.350000 | .999755 | .002 |

The greatest deviation was for Neptune, with an error of less than three tenths of a per cent proving that this law works. I would suggest that the very small deviation for Pluto is caused by greater accuracy in the data on this planet. Pluto has been recently subjected to an intense scrutiny with modern instruments. Our philosophers are probably complacent about the old data on the other planets, data that was mostly obtained before the modern era of exquisite instrumentation. I would also suggest that the physical orbits of the planets may not be as precise on a year to year basis as we suppose. I will also predict that all planetary motion will be found to vary in such a way that Kepler's Harmonic Law will be found to be even more accurate than these figures show.

Here is a Law that needs no finagle factors because it just plain works even though it has been modified down through the centuries to produce slightly more accurate answers. It is in almost total harmony with observational data. No need here for a philosopher to arrogantly tell me that I don't understand and/or infer that I am too stupid to ever understand. But we are told that it is the force of gravity that governs the motions of the planets. How do they isolate the individual forces that are involved with planetary motion? They must use simultaneous equations.

But they are dealing with 10 forces at the same time and equations can only absolutely solve a problem when there is only one unknown. If there are two unknown values you get multiple answers. So gravitational solutions must be like ordering in a Chinese restaurant: one force- "Gloup" A and 9 force "Gloup" B, Won-ton and flied lice on side. This poor skeptic sees the possibility of an infinite number of approximate answers.

In the original book, "Mensa Lectures", I calculated the Kepler number for the all 32 moons of the system and found that the numbers ranged 3.239 -E07 to 5.074 -E01. This is a spread of over 1.5 million or 6 magnitudes. Newton had erroneously assumed that Kepler's original law would also apply to 32 known moons of our system.

After publication I found out from a quasi friendly Mensa Astronomer that the astronomers had kept another secret from my physics books and even the CRC Handbook. Kepler numbers are now derived by adding the orbited body's mass to that of the satellite in question, multiplying that by the satellite's period squared and dividing that product by the satellite's distance cubed. I did a few and found it resulted in much better answers but I leave all of this to the next interested person.

Prepare ye now the stake, the faggots and the torch for I am about to utter heretical thoughts. I believe that the moons and planets are acted upon by electrical forces generated by the Sun. I feel it reasonable to believe that there must be at least some additional forces at work on the system.

We are told that Newton wrote the "Principia" over a period of twenty years. My findings indicate that either this otherwise meticulous man did not proof read his copy or that the Father of modern science developed and used any figures that would prove whatever contention he was concerned with at the time. I also find it incredibly strange that these errors were not found and made public during the 301 years since the publication of the "Principia."

Were the priests of the scientific religion so blind? Why should a heavy construction hard hat, a man without academic credentials, a man who is a basement crack pot have to point out the obvious?

**Now you are entitled to believe anything that you want. However, remember that when observational data or experiment conflicts with a theory, no matter how beautiful the theory or how impressive the credentials of its author, a rational person pitches out the theory.**

1. p.   87, "NEWTON'S CLOCK", Peterson, W.H. Freeman, 1993
2. p.   633, "NEWTON'S PRINCIPIA", Cajori, University of California, 1934
3. p.   634, Ibid.
4. p.   566, Ibid
5. p.   F-160, "CRC Handbook of Chemistry and Physics", 54th edition
6. p   F-169, Ibid.
7. p.   417, "NEWTON'S PRINCIPIA", Cajori, University of California, 1934
8. p.   482, Ibid.
9. p.   595, Ibid.
10. p.   414, Ibid.
11. p.   482, Ibid.
12. p   409, Ibid.